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Daniel Patrick dpatrick@cuddyfeder.com

6/16/21

## VIA ELECTRONIC AND FEDERAL EXPRESS

Melanie A. Bachman Executive Director Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

Re: New Cingular Wireless PCS, LLC ("AT&T")

Notice of Exempt Modification Emergency Back-up Generator 244 Gates Road, Lebanon, CT 06249 Lat.: 41.682936°; Long.: -72.216193°

Dear Ms. Bachman:

This letter and enclosures are respectfully submitted on behalf of New Cingular Wireless PCS, LLC ("AT&T"). AT&T currently maintains its wireless telecommunications facility on the existing tower located at 244 Gates Road in the Town of Lebanon, Connecticut. The underlying property and existing tower structure are owned by New Cingular Wireless PCS, LLC ("AT&T"). AT&T submits this letter and enclosures to the Connecticut Siting Council ("Council") to notify the Council of AT&T's intent to perform modifications to the existing facility that do not have substantial adverse environmental effects and thus do not require a certificate pursuant to Section 16-50k of the Connecticut General Statutes.

AT&T intends to install one (1) new Generac 30kW Diesel Generator within the existing grade-level fenced equipment compound as demonstrated on the plans enclosed as Attachment 1. AT&T's existing facility supports its FirstNet program which provides first responders with priority access to AT&T's network to ensure adequate communication capabilities in the event of emergency. AT&T's proposed generator will ensure that critical communication capability for first responders and the public are not lost in the event of a loss of power.

AT&T's proposed generator will also advance the State's goal of natural disaster and emergency preparedness. As discussed in the Council's Docket 432 Findings and Report and Docket 440 proceedings and Findings of Fact (Nos. 76-77), in response to two significant storm events in 2011, the State formed a Two Storm Panel (the "Panel") that evaluated Connecticut's approach to planning and mitigation of impacts associated with emergencies and natural disasters. The Panel found that "wireless telecommunications service providers were not prepared to serve residential and business

WESTCHESTER | NEW YORK CITY | HUDSON VALLEY | CONNECTICUT



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customers during a power outage" because certain companies had limited backup generator capacity. The Panel also noted that "[t]he failure of a large portion of Connecticut's telecommunications system during the two storms is a life safety issue." The Panel recommended that State regulatory bodies review "telecommunications services currently in place to verify that the vendors have sufficient generator and backhaul capacity to meet the emergency needs of consumers and businesses" and that the "Connecticut Siting Council should require continuity of service plans for any cellular tower to be erected." The planned modifications will ensure continuity of services by reinforcing AT&T's backup power and backhaul capacity to meet the emergency needs of first responders, consumers, and businesses in the event of a power outage.

The planned modifications to the facility fall squarely within the activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2) as the planned modifications:

- Will not result in an increase in the height of the existing structure;
- Will not require the extension of the site boundary;
- Will not increase noise levels at the facility by more than six decibels or more, or to levels that exceed state or local criteria since emergency backup generators are exempt from noise regulations as "noise created as a result of, or relating to, an emergency";
- Will not increase radio frequency emission at the facility to a level at or above the Federal Communications Commission safety standards;
- Will not cause a change or alteration in the physical or environmental characteristics of the site; and
- Will not impair the structural integrity of the facility.

The facility was unanimously acknowledged/approved by the Connecticut Siting Council on April 10, 1990 with conditions of "Option Two", the replacement of both the existing 80' and 120' towers with on self-supporting 120' tower. Original approvals documents are included as Attachment 2. AT&T's proposed modifications comply with the original approvals and approvals for subsequent modifications.

The proposed modifications will have no impact on the existing tower structure itself or the radio-frequency emissions as the proposed modifications only consist of the addition of one new generator within the grade-level equipment compound. Thus, AT&T respectfully requests a waiver from submission of information relating to the existing tower structure or the radio-frequency emissions.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73 for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-73. In accordance with R.C.S.A. §



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16-50j-73, a copy of this letter and enclosure are being sent to First Selectman Kevin Cwikla of the Town of Lebanon as well as the property owner and structure owner identified above. Certification of Service is enclosed as Attachment 3.

For the foregoing reasons, AT&T respectfully submits that the proposed modification to the above referenced wireless telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Very truly yours,

**Daniel Patrick** 

### Attachments

cc: First Selectman Kevin Cwikla, Town of Lebanon Philip Chester, Town of Lebanon Town Planner AT&T (property and structure owner) General Dynamics Information Technology, Inc. Lucia Chiocchio, Esq. Julie Durkin

# ATTACHMENT 1



# **GENERATOR PROJECT 30KW GENERAC DIESEL GENERATOR 200A GENERAC ATS**

244 GATES ROAD LEBANON, CT 06249

# 1 VICINITY MAP SITE LOCATION

**SITE NAME: LEBANON** 

FA LOCATION CODE: 10035007

### SCOPE OF WORK

ADD STANDBY GENERATOR, ASSOCIATED CONCRETE PAD, AND UTILITY EQUIPMENT TO EXISTING AT&T EQUIPMENT AREA. THERE WILL BE NO CHANGE IN THE SIZE OR HEIGHT OF THE TOWER OR ANTENNAS.

> TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN CONNECTICUT

## CALL BEFORE YOU DIG 811 OR 1-800-922-4455

CONNECTICUT PUBLIC ACT 87-71 REQUIRES MIN. 2 WORKING DAYS NOTICE BEFORE YOU EXCAVATE.

# APPLICABLE BUILDING CODE & STANDARDS

NI WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF THE FOLLOWING CODES AS ADOPTED BY THE GOVERNING LOCAL AUTHORITIES. NOTHING N THESE PLANS ARE TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

- INTERNATIONAL BUILDING CODE 2015
- . NATIONAL ELECTRIC CODE 2017
- 3. AMERICAN CONCRETE INSTITUTE (ACI) 3 I 8. BUILDING CODE REQUIREMENTS FOR STRUCTURAL
- . AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION
- . TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL TOWER AND ANTENNA SUPPORTING STRUCTURES
- S. TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR

# PROJECT INFORMATION

# PROJECT MANAGER:

GENERAL DYNAMICS WIRELESS SERVICES GGI MOORE RD STE I I O

KING OF PRUSSIA, PA 19406 joseph.jarvis@gdit.com

RAMAKER & ASSOCIATES, INC. 855 COMMUNITY DRIVE 5AUK CITY, WI 53583 PH.: (608) 643-4100 CONTACT: TYLER BEATTY

APPLICANT INFORMATION: 150 STANDARD DR HANOVER, MD 21076

SITE NAME: LEBANON FA NUMBER: 10035007

PROPERTY OWNER:

1025 LENOX PARK BLVD NE 3RD FLOOR ATLANTA, GA 30319

ADDRESS: 244 GATES ROAD

LEBANON, CT 06249 COUNTY: NEW LONDON

41.682936° -72.216193° LONG.:

GROUND ELEVATION: 668 FT AMSL

DO NOT SCALE DRAWINGS CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE

PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO THE CLIENT IS STRICTLY PROHIBITED

# SHEET INDEX

T- I TITLE SHEET

GENERAL:

N-I GENERAL NOTES

A-I SITE PLAN

S-I FOUNDATION DETAILS

## ELECTRICAL & GROUNDING:

- F-I WIRING DETAILS
- E-2 PANEL AND PENETRATION DETAILS E-3 ATS, CONDUIT & GROUND ROD DETAILS
- GENERAC GENERATOR SPECIFICATIONS
- E-4. I GENERAC GENERATOR SPECIFICATIONS
- E-4.2 GENERAC GENERATOR SPECIFICATIONS GENERAC ATS SPECIFICATIONS
- E-5. I GENERAC ATS SPECIFICATIONS

## SIGNATURE BLOCK

AT¢T MGR. DATE

DATE GENERAL DYNAMICS

CONSTRUCTION MGR.

SITE ACQUISITION DATE

# RAMAKER (608) 643-4100 www.ramaker.com

PREPARED FOR:



#### CONSULTANT:

#### **GENERAL DYNAMICS**

Information Technology, Inc.

GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

hereby certify that this plan, specification, or report was prepare, y me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of <u>Connecticut</u>.



| MARK           | DATE | DESCRIPTION |      |            |
|----------------|------|-------------|------|------------|
| ISSUE<br>PHASE |      | -           | DATE | 05/26/2021 |

# LEBANON FA ID # 10035007

244 GATES ROAD EBANON, CT 06249

TITLE SHEET

SCALE: NONE

50179 T-1

1

#### NOTES TO SUBCONTRACTOR:

- THE GENERAL SUBCONTRACTOR MUST VERIFY ALL DIMENSIONS. CONDITIONS AND FLEVATIONS BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
- 2. IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FORM WORK, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL ORDINANCES, TO SAFELY EXECUTE ALL WORK AND SHALL BE RESPONSIBLE FOR SAME. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.
- 3. THE SUBCONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMAN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHOD NEEDED FOR PROPER PERFORMANCE OF THE WORK
- 4. CONSTRUCTION SUBCONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION SUBCONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION SUBCONTRACTOR FURTHER AGREES TO INDEMNIFY AND HOLD DESIGN ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED. IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
- 5. SITE GROUNDING SHALL COMPLY WITH AT\$T WIRELESS SERVICES TECHNICAL SPECIFICATIONS FOR FACILITY GROUNDING FOR CELL SITE STANDARDS, LATEST EDITION, AND COMPLY WITH AT\$T TOWERS GROUNDING CHECKLIST, LATEST VERSION, WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN. GROUNDING SHALL BE COMPLETED BEFORE ERECTION OF TOWER.
- . ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR HE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION, IF TEMPORARY LIGHTING AND MARKING IS REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION (FAA), IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE NECESSARY LIGHTS AND NOTIFY THE PROPER AUTHORITIES IN THE EVENT OF A PROBLEM
- 7. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.
- 8. ANY DAMAGE TO THE ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER
- . THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. SUBCONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL
- IO. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
- . THE SUBCONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES. SILT AND EROSION CONTROL SHALL BE MAINTAINED ON THE DOWNSTREAM SIDE OF THE SITE AT ALL TIMES. ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE.
- 2 CLEARING OF TREES AND VEGETATION ON THE SITE SHOULD BE HELD TO A MINIMUM. ONLY THE TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED. ANY DAMAGE TO THE PROPERTY OUTSIDE THE LEASED PROPERTY SHALL BE REPAIRED BY THE SUBCONTRACTOR
- 3. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.
- 4. SEEDING AND MULCHING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE DEVELOPMENT. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAIN AN ADEQUATE COVER OF VEGETATION OVER THE SITE FOR A ONE YEAR PERIOD
- 15. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
- 6. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT
- 7. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR TO VERIFY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS. THE SUBCONTRACTOR SHALL CONTACT THE LOCAL JURISDICTION'S DIGGER'S HOTLINE BEFORE DIGGING OR DRILLING. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE SUBCONTRACTOR'S EXPENSE.

#### GENERAL NOTES:

- . THIS PROPOSAL IS FOR THE ADDITION OF A NEW GENERATOR ON A CONCRETE PAD TO AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF AN EQUIPMENT SHELTER AND TOWER
- 2. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE.
- 3. THE PROPOSED FACILITY IS UNMANNED AND IS NOT FOR HUMAN HABITAT. (NO HANDICAP

- ACCESS IS REQUIRED)
- 4 OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION APPROXIMATELY 2 TIMES PER MONTH BY AT&T TECHNICIANS.
- 5. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.
- 6. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 7. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION.
- 8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTION REQUIRED FOR CONSTRUCTION.
- 9. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS

#### ELECTRICAL NOTES: A. GENERAL

- I. COORDINATE LOCATION AND POWER REQUIREMENTS OF ALL EQUIPMENT WITH AT\$T AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.
- 2. COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL AND TELEPHONE SERVICES WITH THE PROPERTY REPRESENTATIVE, AT&T AND UTILITY COMPANIES. ROUTING OF CONDUITS MAY BE MODIFIED TO MEET SITE REQUIREMENTS. EXACT CONDUIT ROUTING TO BE DETERMINED IN THE FIELD.
- 3. ALL WIRING AND EQUIPMENT SHOWN ON ELECTRICAL SHEETS SHALL BE FURNISHED AND INSTALLED UNDER ELECTRICAL PORTION OF CONTRACT UNLESS OTHERWISE NOTED
- 4. UNINTERRUPTED ELECTRICAL SERVICE FOR EXISTING EQUIPMENT SHALL BE MAINTAINED DURING THE INSTALLATION OF THE WORK DESCRIBED UNDER THESE DOCUMENTS. TEMPORARY EQUIPMENT, CABLES AND WHATEVER ELSE IS NECESSARY SHALL BE PROVIDED AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE. TEMPORARY SERVICE FACILITIES, IF REQUIRED AT ANY TIME, SHALL NOT BE DISCONNECTED OR REMOVED UNTIL NEW SERVICE EQUIPMENT IS IN PROPER OPERATION. IF ANY SERVICE OR SYSTEM MUST BE INTERRUPTED. THE CONTRACTOR SHALL REQUEST PERMISSION IN WRITING STATING THE DATE, TIME, ETC. THE SERVICE WILL BE INTERRUPTED AND THE AREAS AFFECTED. THIS REQUEST SHALL BE MADE IN SUFFICIENT TIME FOR PROPER ARRANGEMENTS TO BE MADE. WRITTEN PERMISSION SHALL BE OBTAINED FROM THE OWNER BEFORE INTERRUPTING ELECTRICAL SERVICE
- 5. COORDINATE NEW WORK WITH OTHER TRADES AND VERIFY EXISTING CONDITIONS TO AVOID INTERFERENCE. IN CASE OF INTERFERENCE, AT&T'S REPRESENTATIVE WILL DECIDE WHICH WORK IS TO BE RELOCATED, REGARDLESS OF WHICH WAS FIRST INSTALLED.
- 6. THE INSTALLATION MUST COMPLY WITH NEC AND ALL FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.
- 7. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT UNLESS OTHERWISE DEFINED BY DIMENSIONS OR DETAILS. EXACT EQUIPMENT LOCATIONS AND RACEWAY ROUTING SHALL BE GOVERNED BY ACTUAL FIELD CONDITIONS AND/OR DIRECTIONS FROM AT&T'S REPRESENTATIVE.
- 8. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.
- 9. ALL MATERIALS SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE STANDARDS REFERENCED BELOW:
  - ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE) ASTIM (AMERICAN SOCIETY FOR TESTING MATERIALS)
  - ETL (ELECTRICAL TESTING LABORATORY) ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
  - IFFE (INSTITUTE OF FLECTRICAL AND FLECTRONIC ENGINEERS)
  - MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
  - NESC (NATIONAL ELECTRICAL SAFETY CODE)
  - NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION) NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
  - UL (UNDERWRITER'S LABORATORY)
- IO. CONTRACTOR SHALL REVIEW PLANS, DETAILS AND SPECIFICATIONS IN DETAIL AND ADJUST WORK TO CONFORM WITH ACTUAL SITE CONDITIONS SO THAT ELECTRICAL DEVICES AND EQUIPMENT WILL BE LOCATED AND READILY ACCESSIBLE. QUANTITIES LISTED IN MATERIAL LISTS ON THE DRAWINGS ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL PROVIDE HIS OWN TAKEOFF FOR MATERIAL QUANTITY AND TYPES BASED ON ACTUAL SITE CONDITIONS, IN ADDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO INSTALL EQUIPMENT FURNISHED BY AT&T OR ITS SUPPLIERS. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN OR SHOWN ON THE DRAWINGS. BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION. SHALL BE INCLUDED.
- II. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) AT\$T'S REPRESENTATIVE OF ANY CONFLICTS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK, IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE
- I 2. ALL FLOORS WHERE PENETRATIONS ARE REQUIRED IN BUILDING ARE TO BE CORE DRILLED AND THEN FIREPROOFED.

- PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR AS REQUIRED BY CODE SUCH THAT NO MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (380 DEGREES TOTAL) EXIST IN A CONDUIT RUN.
- 2. ALL POWER AND CONTROL/INDICATION WIRING SHALL BE TYPE THHN/THWN 800V RATED 75 DEGREES CELSIUS, UNLESS NOTED OTHERWISE.

- 3. SCHEDULE 80 PVC CONDUIT SHALL BE USED ABOVE GROUND, WHERE ABOVE GRADE IS DEFINED AS THE GROUND OF THE TURN-UP
- 4. BELL END OR TERMINAL ADAPTER MUST BE INSTALLED ON END OF PVC CONDUIT PER NEC 352.46, 300.4 F. (3)
- CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH NEC TABLE 346-10. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER
- 6. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.
- 7. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE ALL POWER CIRCUITS SHALL CONTAIN A GROUND WIRE.
- 8. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.
- 9. CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND
- 10. INSTALL PULL STRING IN ALL CONDUIT.
- II. FOR ROOFTOP INSTALLS AND BUILD-OUTS, CONDUITS INSIDE BUILDING AND ON ROOF SHALL BE RGS. UNLESS OTHERWISE NOTED. FOR RAW LAND SITES AND CO-LOCATES. PVC SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHERWISE.
- 12. MAINTAIN MINIMUM 1'-0" VERTICAL AND 1'-0" HORIZONTAL SEPARATIONS FROM ANY MECHANICAL GAS PIPING.
- 1.3 ALL WIRING ROUTED IN PLENUM TO BE RATED OR IN METALLIC FLEX (LIQUIDITE) CONDUIT

#### C. EQUIPMENT

- EQUIPMENT/PARTS CONNECTED TO EXISTING PANELS, DUCTS, ETC. SHALL MATCH THE CHARACTERISTICS (A/C, V, A) OF THAT EQUIPMENT.
- 2. ALL ELECTRICAL EQUIPMENT OUTSIDE SHALL BE NEMA OR 3R RATED

- ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTORS PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND CONNECTIONS.
- ALL EQUIPMENT SURFACES TO BE BONDED TO GROUNDING SYSTEM SHALL BE STRIPPED OF ALL PAINT AND DIRT. CONNECTIONS TO VARIOUS METALS SHALL BE OF A TYPE AS TO CAUSE A GALVANIC OR CORROSIVE REACTION. AREA SHALL BE REPAINTED FOLLOWING
- 3. ANY METALLIC ITEM WITHIN 6' OF GROUND CONDUCTORS MUST BE CONNECTED TO THE GROUNDING SYSTEM
- 4. EXTERIOR, ABOVE GRADE GROUND CONNECTIONS SHALL BE FURNISHED WITH A LIBERAL PROTECTIVE COATING OF ANTI-OXIDE COMPOUND.
- ALL MATERIALS AND LABOR REQUIRED FOR THE GROUNDING SYSTEM AS INDICATED ON THE PLANS AND DETAILS, AND AS DESCRIBED HEREIN SHALL BE FURNISHED BY THIS CONTRACTOR UNLESS OTHERWISE NOTED
- EXACT LOCATION OF GROUND CONNECTION POINTS SHALL BE DETERMINED IN FIELD. ADJUST LOCATIONS INDICATED ON PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS TO KEEP THE GROUND CONNECTION CABLES AS SHORT AS PRACTICAL
- PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS AS REQUIRED BY THE CURRENT EDITION OF THE NATIONAL ELECTRIC CODE (1999) AND THE CURRENT EDITION OF THE NATIONAL ELECTRICAL SAFETY CODE. BONDING JUMPERS WITH APPROVED GROUND FITTINGS SHALL BE INSTALLED AT ALL RACEWAYS, EQUIPMENT ENCLOSURES, PULL BOXES ETC. TO MAINTAIN GROUND CONTINUITY WHERE REQUIRED BY CODE
- 8. ALL EQUIPMENT GROUND CONDUCTORS SHALL BE TIN COATED, #2 AWG COPPER UNLESS NOTED OTHERWISE ON THE DRAWINGS
- PROVIDE PRE AND POST GROUND TEST RESULTS, USING CLAMP-ON TESTER. TEST RESULTS SHALL BE PHOTOS WITH DIGITAL TIME AND GPS STAMPED/EMBEDDED.

#### E. INSPECTION/DOCUMENTATION

- THE CONTRACTOR, UPON COMPLETION OF HIS WORK, SHALL PROVIDE AS-BUILT DRAWINGS INFORMATION SHOULD BE GIVEN TO THE GENERAL CONTRACTOR FOR INCLUSION IN FINAL AS-BUILT SURVEY DOCUMENTS TO BE GIVEN TO THE OWNER.
- CONTRACTOR SHALL SUPPLY DOCUMENTATION ATTESTING TO THE COMPLETE GROUND SYSTEM'S RECEPTIVITY (MAX. 5 OHMS).
- 3. AN ELECTRICAL INSPECTION SHALL BE MADE BY AND INSPECTING AGENCY APPROVED BY AT\$T'S REPRESENTATIVE. CONTRACTOR SHALL COORDINATE ALL INSPECTIONS AND OBTAIN POWER COMPANY APPROVAL
- 4. CONTRACTOR SHALL HAVE ATS AND GENERATOR RELAY INSTALLATION AND CONNECTIONS INSPECTED BY OTHERS TO ENSURE THAT ULLISTING FOR THAT EQUIPMENT IS NOT VOIDED



PREPARED FOR:



#### CONSULTANT:

## **GENERAL DYNAMICS**

Information Technology, Inc.

**GENERAL DYNAMICS** 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

hereby certify that this plan, specification, or report was pre me or under my direct supervision and that I am a duly Licensed onal Engineer under the laws of the State of <u>Connecticut</u>.



DATE DESCRIPTION

FINAL DATE 05/26/202

# LEBANON FA ID # 10035007

244 GATES ROAD EBANON, CT 06249

GENERAL NOTES

SCALE: NONE

50179 N- I

#### GENERAL:

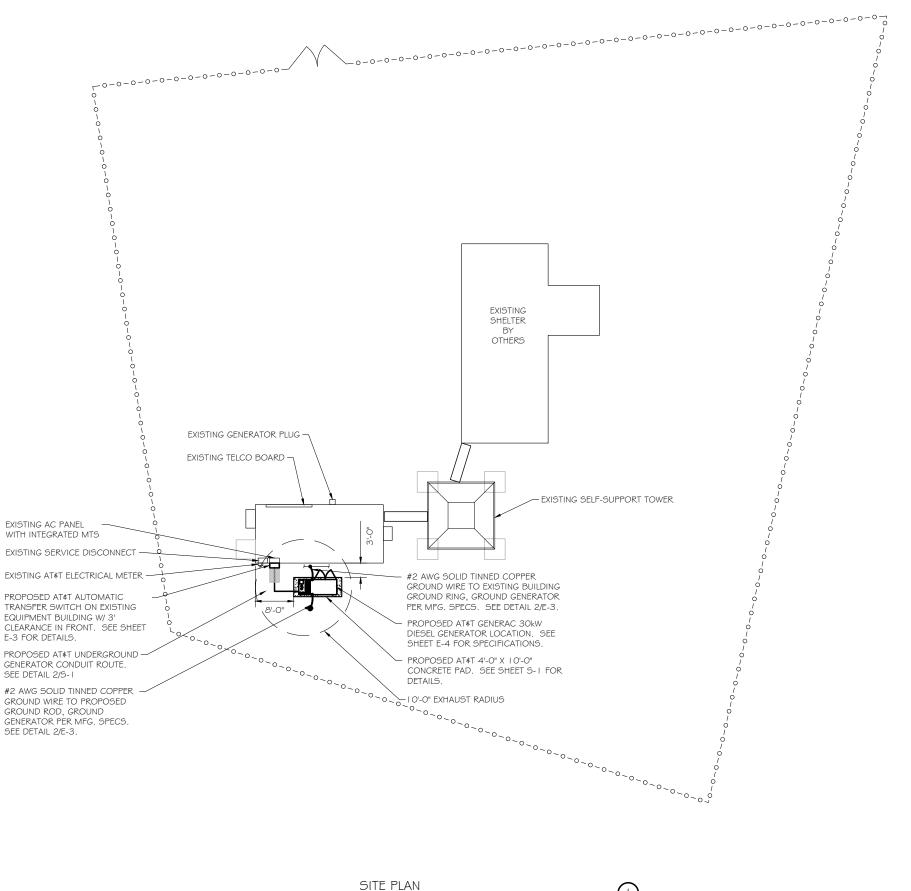
NEW GENERAC DIESEL GENERATOR PROVIDED BY GENERAL DYNAMICS & INSTALLED BY GENERAL CONTRACTOR, SEE E-4.

SCOPE OF WORK DETAILS

- NEW 4'-0" X 10'-0" CONCRETE PAD PROVIDED \$ INSTALLED BY GENERAL CONTRACTOR (AS REQUIRED) SEE S-I
- NEW GENERAC AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL DYNAMICS \$ INSTALLED BY CONTRACTOR (AS REQUIRED)
- CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION
- CONTRACTOR SHALL RESTORE & REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION

- INSTALL PULL STRING IN EACH CONDUIT
   (1) NEW 2" AND (1) NEW 1" ELECTRICAL CONDUITS WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 \$ E-3.
- (I) NEW I " ELECTRICAL CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO AC PANEL. CONDUIT PROVIDED \$ INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- (1) NEW 1" ALARM CONDUIT & CABLING PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.

NEW EXOTHERMIC CONNECTION FROM EXISTING GROUND RING TO NEW MECHANICAL CONNECTION AT GENERATOR CHASSIS. GENERAL CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 8'-O" APART.



SCALE: I" = 20'



(608) 643-4100 www.ramaker.com

PREPARED FOR:



#### CONSULTANT:

## GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Connecticut.



MARK DATE DESCRIPTION HASE FINAL DATE 05/26/2021

# LEBANON FA ID # 10035007 PRO IECT INFORMATIO

244 GATES ROAD EBANON, CT 06249

SITE PLAN & EQUIPMENT LAYOUT

| Q                 | 1 ( | )' | 20'                 |     | 40' |
|-------------------|-----|----|---------------------|-----|-----|
|                   |     |    |                     |     |     |
| l l" x<br>22" x   |     |    | " = 20'<br> " = 10' |     |     |
| PROJECT<br>NUMBER | Ţ   |    | 5C                  | 179 |     |
| SHEET<br>NUMBER   |     |    | Α                   |     |     |

ANCHORS MINIMUM (4) @ 5/8" FOR GEN-SET MOUNTING

FUEL FILL: 5 GALLON SPILL CONTAINMENT WITH ALARM

BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.

SHALL BE

PER UL-142 STANDARDS

40% REMAINING FOR ALARM

20% REMAINING FOR SHUT-DOWN

FACTORY PRE-SET AT 95% FULL FOR ALARM

SEAMS

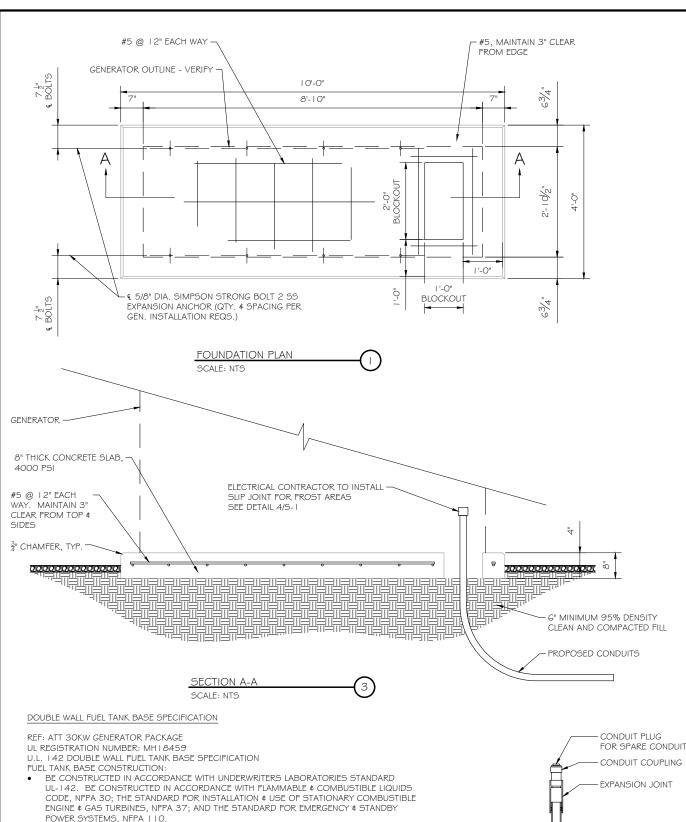
SUB BASE TANK TESTING: PRIMARY TANK \$ SECONDARY CONTAINMENT BASIN SECTIONS

FUEL CONTAINMENT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT

BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK CAPACITY TO PREVENT ESCAPE OF

FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT

PRESSURIZED AT 3-5 PSI AND LEAK-CHECKED TO ENSURE INTEGRITY OF SUB BASE WELD



CONDUIT ELBOW

SLIPJOINT DETAIL

SCALE: NTS

PROPOSED

CONDUIT

NOTE: VERIFY WIRE AND CONDUIT QUANTITY & SIZES WITH GENERATOR MAKE \$ MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL RESTORE SURFACE TO MATCH REQUIREMENTS WITH LOCAL UTILITY PROVIDER. ORIGINAL CONDITION UNDISTURBED SOIL COMPACTED BACKFILL (SUITABLE ON SITE MATERIAL) 6" WARNING TAPE ELECTRICAL CONDUIT(S) WHERE APPLICABLE \* 6" TYF

\* SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

I. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW. 2. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLE, BTS EQUIPMENT, ETC.)

3. INSTALL UTILITY PULLBOXES PER NEC.

UTILITY CONDUIT TRENCH SCALE: NTS

#### STRUCTURAL GENERAL NOTES

- I.I DESIGN & CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, ACI 318-11. IN CASE OF CONFLICT BETWEEN THE CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, GENERAL NOTES AND/OR MANUFACTURER'S REQUIREMENTS, USE THE MOST STRINGENT PROVISIONS.
- I.2 IT IS THE EXPRESS INTENT OF PARTIES INVOLVED IN THIS PROJECT THAT THE CONTRACTOR OR SUBCONTRACTOR OR INDEPENDENT CONTRACTOR OR THE RESPECTIVE EMPLOYEES SHALL EXCULPATE THE ARCHITECT, THE ENGINEER, TECH CONSTRUCTION MANAGER, THE OWNER, \$ THEIR AGENTS FROM ANY LIABILITY WHATSOEVER \$ HOLD THEM HARMLESS AGAINST LOSS, DAMAGES, LIABILITY OR ANY EXPENSE ARISING IN ANY MATTER FROM THE WRONGFUL OR NEGLIGENT ACT, OR FAILURE TO CARRY METHODS, TECHNIQUES OR PROCEDURES OR FAILURE TO CONFORM TO THE STATE SCAFFOLDING ACT IN CONNECTIONS WITH THE WORK.
- 1.3 DO NOT SCALE DRAWINGS
- 1.4 VERIPY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS 1.5 DESIGN LOADS ARE (GENERAC):

LIVE LOAD

EQUIPMENT SIZE : 889.1" H, 106" W, 38" D

WEIGHT WITH WOODEN SHIPPING SKID ENCLOSED GENERATOR

: 3974 LBS 2.0 FOR DESIGN \$ ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF 3.0 CONCRETE

3.1 MEET OR EXCEED THE FOLLOWING CODES & STANDARDS: : ACI3 | 8- | |

DESIGN CONSTRUCTION : ACI301

CRSI MANUAL OF STANDARD PRACTICE DETAILING REINF. STEEL ASTM A 615 GRADE 60, DEFORMED MIXING ASTM C 94. READY MIX CONCRETE AIR ENTRAINMENT : ACI 3 | 8 AND ASTM C-260

AGGREGATE : ASTM C 33 AND C 330 (FOR LIGHT WEIGHT) 3.2 CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM

- 3.3 DO NOT FIELD BEND OR WELD TO GRADE 60 REINFORCED STEEL
- 3.4 PROVIDE AIR ENTRAINED CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WEATHER.
- 3.5 MAXIMUM AGGREGATE SIZE: 3/4" 3.6 DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE.

- 3.7 MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
- 4 O FOUNDATION & FXCAVATION NOTES
- 4.1 SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED. NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 1800 PSF.
- 4.2 ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FRO FOUNDATION \$ SLAB SUBGRADE \$ BACKFILL AREAS \$ THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D1557)
- 4.3 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST, OR ICE FROM PENETRATING ANY FOOTING OR STRUCTURAL SUBGRADE BEFORE & AFTER PLACING OF CONCRETE, AND UNTIL SUCH CONCRETE HAS FULLY CURED.



PREPARED FOR:



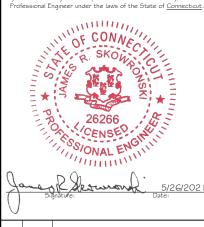
CONSULTANT:

## **GENERAL DYNAMICS**

Information Technology, Inc.

GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

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IARK DATE DESCRIPTION

DATE 05/26/202 SUE FINAL

LEBANON FA ID # 10035007

PRO IECT INFORMA 244 GATES ROAD EBANON, CT 06249

FOUNDATION DETAILS

SCALE: NONE

50179 5-1

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#### DIAGRAM CIRCUIT SCHEDULE

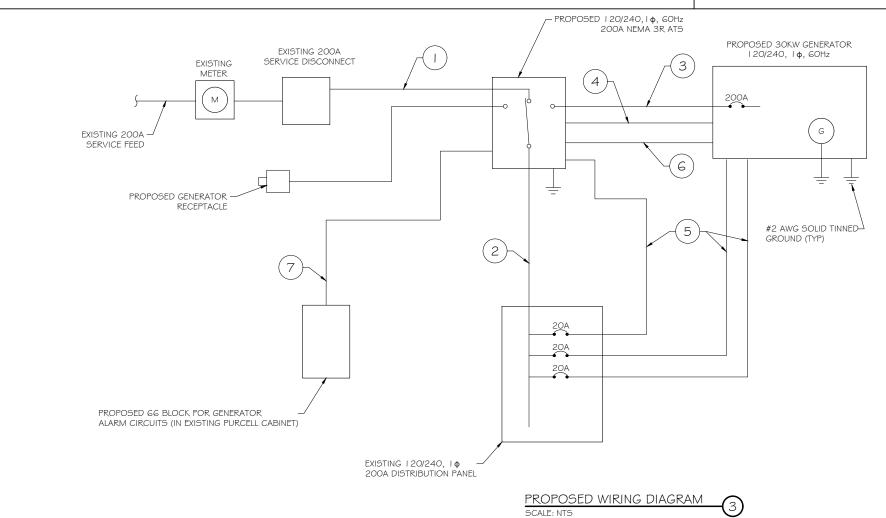
| NO. | FROM                                 | ТО                           | WIRES  | GROUND                        | CONDUIT<br>SIZE | FUNCTION  |
|-----|--------------------------------------|------------------------------|--|-------------------------------|-----------------|---|
|     | NORMAL POWER<br>SOURCE               | AUTOMATIC<br>TRANSFER SWITCH | (3) 3/0  | (1) #4                        | 2"              | NORMAL POWER FEEDER TO ATS<br>(CUT BACK EXISTING)   |
| 2   | AUTOMATIC<br>TRANSFER SWITCH         | LOAD CENTER                  | (3) 3/0  | (1) #4                        | 2"              | POWER FEEDER FROM ATS TO<br>PANEL   |
| 3   | GENERATOR                            | AUTOMATIC<br>TRANSFER SWITCH | (3) 3/0  | (1) #4                        | 2"              | EMERGENCY POWER FEEDER TO<br>ATS  |
| 4   | AUTOMATIC<br>TRANSFER SWITCH         | GENERATOR                    | (2) #10  | (1) #10                       | 1               | START CIRCUIT   |
| 5   | LOAD CENTER<br>(DISTRIBUTION CENTER) | GENERATOR, ATS               | (2) #12<br>(2) #12<br>(2) #12                  | (1) #12<br>(1) #12<br>(1) #12 | "<br>  "        | CIRCUIT FOR GENERATOR BLOCK HEATER \$ BATTERY HEATER CIRCUIT FOR BATTERY CHARGER CIRCUIT FOR ATS  |
| 6   | GENERATOR                            | AUTOMATIC<br>TRANSFER SWITCH | I 2-PAIR<br>24 AWG<br>OR<br>2EA G-PAIR<br>CAT5 | N/A                           | 1"              | ALARM CABLES (I) I 2 PAIR 24 AWG. PROVIDE<br>24" OF SLACK CABLE. FINAL PUNCH DOWN IS<br>BY AT&T TECH. LABEL ALL WIRES   |
| 7   | AUTOMATIC<br>TRANSFER SWITCH         | ALARM BLOCK                  | I 2-PAIR<br>24 AWG<br>OR<br>2EA G-PAIR<br>CAT5 | N/A                           | 1"              | ALARM CABLES (1) 12 PAIR 24 AWG (RUN TO<br>PURCELL CABINET \$ INTO ALARM BOX).<br>PROVIDE 24" OF SLACK CABLE. FINAL PUNCH<br>DOWN IS BY AT\$T TECH. LABEL ALL WIRES |

#### ALARM WIRE IDENTIFICATION CHART

| WIRE                                  | ALARM             |  |
|---------------------------------------|-------------------|--|
| BROWN<br>BROWN / WHITE                | GENERATOR RUNNING |  |
| GREEN<br>GREEN / WHITE                | CRITICAL FAULT    |  |
| BLUE<br>BLUE / WHITE                  | MINOR FAULT       |  |
| ORANGE<br>ORANGE / WHITE              | LOW FUEL          |  |
| BROWN *<br>BROWN / WHITE *            | FUEL LEAK         |  |
| *CAT5 CABLE ONLY, FROM 2ND CAT5 CABLE |                   |  |

CIRCUIT DETAIL

ALARM WIRING IDENTIFICATION CHART (2) SCALE: NTS





PREPARED FOR:



CONSULTANT:

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MARK DATE DESCRIPTION DATE 05/26/2021

# LEBANON FA ID # 10035007

PROJECT INFORMATION: 244 GATES ROAD LEBANON, CT 06249

WIRING DETAILS

SCALE: NONE

50179 E- I



OF DRAWING CREATION.

EXISTING PANEL SCHEDULE INFORMATION WAS NOT AVAILABLE AT THE TIME

SCOPE OF WORK REQUIRES (3) PROPOSED SINGLE POLE, 20A BREAKERS,

ONE EACH FOR CALLOUT NUMBER 5 ON DETAILS I/E-I AND 3/E-I. UTILIZE

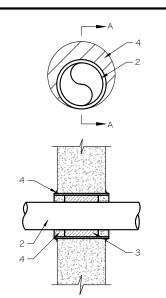
IF SUFFICIENT SPACES ARE NOT PRESENT IN MAIN PANEL, PROVIDE NEW SUBPANEL FED WITH NEW TWO-POLE. I OOA BREAKER IN MAIN PANELBOARD. RELOCATE EXISTING CIRCUITS TO SUBPANEL WHERE REQUIRED. SQUARE D

EMPTY OR SPARE SPACES ON EXISTING PANELBOARD IF POSSIBLE.

QO LOAD CENTER RECOMMENDED AS NECESSARY.

EXISTING PANEL SCHEDULE

SEQUENCE SINGLE BREAKER POSITION FOR GENERATOR, BATTERY CHARGER, BATTERY HEATER AND BLOCK HEATER



- IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-HR U.L. PENETRATION APPROPRIATE FOR THE EXISTING WALL TYPE SHALL BE CONSTRUCTED
- GC SHALL USE NON-SHRINKING CAULK TO WEATHERSEAL ALL PENETRATIONS INTO OR THRU SHELTER WALL.

U.L. SYSTEM NO. C-AJ-1150 CONDUIT THROUGH BEARING WALL SIMILAR TO U.L. DESIGN NO. U902 F RATING = 3 HR T RATING = O HR

- I. FLOOR OR WALL ASSEMBLY: MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX DIAMETER OF OPENING IS 4". SEE CONCRETE BLOCKS 9CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
- 2. THROUGH PENETRATIONS : ONE METALLIC PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM O". (POINT CONTACT) TO MAXIMUM 1-3/8". THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:
  - A. STEEL PIPE-NOMINAL 6" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER)
  - B. IRON PIPE-NOMINAL 6" DIAMETER (OR SMALLER) CAST OR DUCTILE IRON PIPE. C. CONDUIT - NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOMINAL 3-1/2" DIAMETER (OR SMALLER) STEEL CONDUIT.
- 3. PACKING MATERIAL: MINIMUM 6" THICKNESS OF MIN 4.0 PCF MINERAL WOOL BATTING INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL
- 4. FILL, VOID, OR CAVITY MATERIAL\*: SEALANT: MINIMUM 1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR AND WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE AND CONCRETE, A MINIMUM 1/2" DIAMETER BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL. W RATING APPLIES ONLY WHEN CPGO IS OR CPGO4 SEALANT IS

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP601S, CP604, CP606, OR FS-ONE SEALANT.

\* BEARING THE UL CLASSIFICATION MARK

# OUTER WALL PENETRATION DETAIL (IF APPLICABLE)





Type VN

TAP TO

HORIZONTAL CABLE

VERTICAL STEEL

HORIZONTAL PIPE

SURFACE OR

THE SIDE OF

CABLE TAP TO TOP OF GROUND



THROUGH CABLE TO TOP OF GROUND ROD



Type VS CABLE TAP DOWN AT 45°TO VERTICAL STEEL SURFACE OR SIDE OF HORIZONTAL OR VERTICAL PIPE.



THROUGH CABLE TO SIDE OF GROUND ROD



Type VV THROUGH VERTICAL VERTICAL STEEL SURFACE OR TO THE SIDE OF EITHER HORIZONTAL OR VERTICAL PIPE



Гуре НЅ HORIZONTAL CABLE TAP TO HORIZONTAL STEEL SURFACE OR PIPE.
CABLE OFF SURFACE.



GROUND ROD



Type TA TEE OF HORIZONTAL RUN AND TAP CABLES.





PREPARED FOR:



CONSULTANT:

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**GENERAL DYNAMICS** 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

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MARK DATE DESCRIPTION

DATE 05/26/2021

# LEBANON FA ID # 10035007

PRO IECT INFORMAT 244 GATES ROAD LEBANON, CT 06249

PANEL AND PENETRATION **DETAILS** 

SCALE: NONE

50179 SHEET E-2

\*CONTRACTOR TO UTILIZE NEXT AVAILABLE IN

CADWELD DETAILS

SCALE: NTS

CONDUIT (TYP)

(4

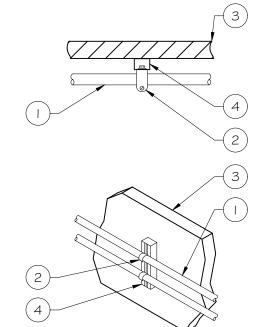
2 BUTTERFLY CLAMP AS REQUIRED

(3) EXISTING WALL/CEILING

VERTICAL "UNISTRUT" P I 000 T' SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

| WALL<br>CONSTRUCTION<br>TYPE | USE   |
|------------------------------|---|
| HOLLOW                       | 3/8" DIA. TOGGLE BOLT   |
| HOLLOW, AT STUD              | 3/8" DIA. LAG SCREW   |
| CONCRETE BLOCK<br>(HOLLOW)   | 3/8" DIA. HILTI HY-20 WITH SCREEN,<br>MINIMUM EMBEDMENT 2-1/2"  |
| CONCRETE (SOLID)             | 3/8" DIA. HILTI HY-150 WITH SCREEN,<br>MINIMUM EMBEDMENT 2-1/2" |
|                              |   |

NOTE: USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT \$ CONNECTIONS OF CHANNELS SPACE UNITS @ 5'-O" O.C. LENGTH OF RUN



- CADWELD - GRADE #2 AWG BCW GROUND RING GROUND ROD COPPERWELD

NOTE:

GROUND RODS MAY BE:

THE LENGTH OF ROD

AVAILABLE

SEE RESISTIVITY REPORT FOR VERIFICATION AS

A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL GROUND RODS INSTALLED

WITHIN CLOSE PROXIMITY TO

TOWER OR WHEN SOIL IS AT OR BELOW 2,000 OHM-CM,

SHALL BE GALVANIZED TO

CORROSION OF TOWER,

(SEE ANSI/TIA-EIA-222-G)

PROVIDE (I) GROUND LEAD TO EACH SIDE OF THE GENERATOR

PREVENT GALVANIC

- COPPER CLAD STEEL - SOLID COPPER GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE

# ₽ 5/8"Ø x 8'-0" LONG (MAX)

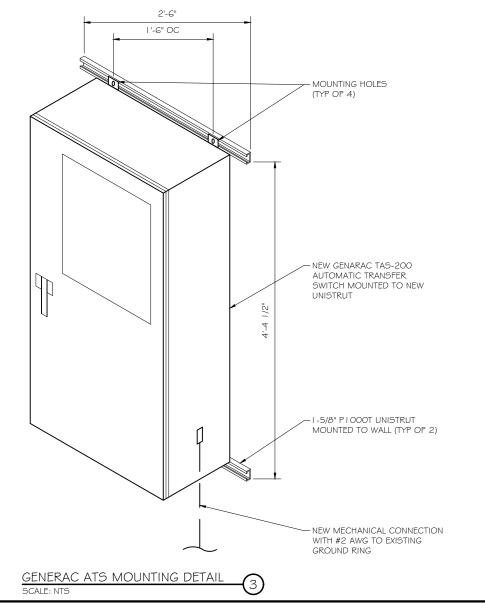
GROUND ROD DETAIL SCALE: NTS

| WALL<br>CONSTRUCTION<br>TYPE | USE   |
|------------------------------|---|
| HOLLOW                       | 3/8" DIA. TOGGLE BOLT   |
| HOLLOW, AT STUD              | 3/8" DIA. LAG SCREW   |
| CONCRETE BLOCK<br>(HOLLOW)   | 7/16" DIA. HILTI HY-20 WITH SCREEN<br>MINIMUM EMBEDMENT 2-1/2"  |
| CONCRETE (SOLID)             | 7/16" DIA, HILTI HY-150 WITH SCREEN<br>MINIMUM EMBEDMENT 2-1/2" |

CONDUIT WALL MOUNT

SCALE: NTS

- . USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTION OF CHANNELS
- 2. GC SHALL USE NON-SHRINKING CAULK TO WEATHER SEAL ALL PENETRATIONS INTO OR THROUGH SHELTER WALL





(608) 643-4100 www.ramaker.com

PREPARED FOR:



CONSULTANT:

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MARK DATE DESCRIPTION DATE 05/26/2021 SSUE FINAL

# LEBANON FA ID # 10035007

PRO IECT INFORMATIO 244 GATES ROAD LEBANON, CT 06249

ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

50179 SHEET E-3

SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET GENERAC INDUSTRIAL

**EPA Certified Stationary Emergency** 

Standby Power Rating 30 kW, 38 kVA, 60 Hz

Prime Power Rating\* 27 kW, 34 kVA, 60 Hz



Image used for illustration purposes only

## **Codes and Standards**

\*EPA Certified Prime ratings are not available in the US or its Territories

Not all codes and standards apply to all configurations. Contact factory for details.





UL2200, UL508, UL489, UL142



CSA C22.2



BS5514 and DIN 6271



**SAE J1349** 



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708



ISO 3046, 7637, 8528, 9001



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41

# **Powering Ahead**

For over 50 years, Generac has provided innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial applications under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

## SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET

**EPA Certified Stationary Emergency** 

#### STANDARD FEATURES

#### **ENGINE SYSTEM**

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection Factory Filled Oil and Coolant
- Radiator Duct Adapter (Open Set Only)
- · Critical Silencer (Enclosed Unit Only) Engine Coolant Heater

#### **Fuel System**

- Fuel Lockoff Solenoid
- Primary Fuel Filter

#### **Cooling System**

- · Closed Coolant Recovery System
- UV/Ozone Resistant Hoses · Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene Glycol Antifreeze

#### **Electrical System**

Battery Charging Alternator

CONTROL SYSTEM

GENERAC

Program Functions

Programmable Crank Limiter

• 7-Day Programmable Exerciser

RS-232/485 Communications

2-Wire Start Capability

Digital H Control Panel- Dual 4x20 Display

Special Applications Programmable Logic Controller

· All Phase Sensing Digital Voltage Regulator

• Date/Time Fault History (Event Log)

Isochronous Governor Control

· Waterproof/Sealed Connectors

- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

#### **ALTERNATOR SYSTEM**

- UL2200 GENprotect<sup>™</sup>
- Class H Insulation Material
- 2/3 Pitch Skewed Stator
- Brushless Excitation
- Sealed Bearing
- Rotor Dynamically Spin Balanced
- Amortisseur Winding (3-Phase Only)
- Full Load Capacity Alternator
- Protective Thermal Switch

#### **GENERATOR SET**

- Internal Genset Vibration Isolation
- . Separation of Circuits High/Low Voltage
- Separation of Circuits Multiple Breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Unit Only)

- High Performance Sound-Absorbing Material (Sound Attenuation Enclosures)
- Gasketed Doors
- Stamped Air-Intake Louvers
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ Textured Polyester Powder Coat Paint

#### FUEL TANKS (If Selected)

- Normal and Emergency Vents
- Sloped Top
- Factory Pressure Tested
- Fuel Level
- RhinoCoat™ Textured Polyester Powder Coat Paint
- Stainless Steel Hardware

- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch

· Audible Alarms and Shutdowns

- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- · Customizable Alarms, Warnings, and Events Modbus<sup>®</sup> Protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

### **Full System Status Display**

- Power Factor
- · kW Hours, Total, and Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents

- Coolant Temperature
- Engine Speed

#### **Alarms and Warnings**

- Oil Pressure
- Coolant Level
- Engine Overspeed
- Battery Voltage
- Alarms and Warnings Spelled Out (No Alarm Codes)

#### **ENCLOSURE (If Selected)**

Rust-Proof Fasteners with Nylon Washers to

GENERAC INDUSTRIAL

- UL 142/ULC S601
- Double Wall
- Sloped Bottom
- Rupture Basin Alarm
- Check Valve In Supply and Return Lines

- Oil Pressure
- Coolant Level
- · Battery Voltage Frequency

- · Coolant Temperature
- Alarms and Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings

CONSULTANT:

PREPARED FOR:

# GENERAL DYNAMICS

RAMAKER

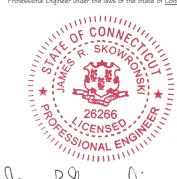
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Information Technology, Inc. GENERAL DYNAMICS

661 MOORE RD STE 110

KING OF PRUSSIA, PA 19406

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RK DATE DESCRIPTION DATE 05/26/2021

> LEBANON FA ID # 10035007

GENERAC 30KW GENERATOR **SPECIFICATIONS** 

SCALE: NONE

244 GATES ROAD

EBANON, CT 06249

50179 F-4

Power Output (kW)

SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET **EPA Certified Stationary Emergency** 

# GENERAC INDUSTRIAL

# **CONFIGURABLE OPTIONS**

#### **ENGINE SYSTEM**

- Oil Heater
- O Critical Silencer (Open Set Only)
- Radiator Stone Guard
- O Level 1 Fan and Belt Guards (Open Set Only)

#### **FUEL SYSTEM**

NPT Flexible Fuel Line

#### **ELECTRICAL SYSTEM**

- 10A UL Listed Battery Charger
- O Battery Warmer

#### **ALTERNATOR SYSTEM**

- Alternator Upsizing
- O Anti-Condensation Heater
- Tropical Coating
- O Permanent Magnet Excitation

#### **GENERATOR SET**

- Extended Factory Testing
- O Pad Vibration Isolation

## O 8 Position Load Center

# **ENGINEERED OPTIONS**

#### **ENGINE SYSTEM**

- Coolant Heater Isolation Ball Valves
- Fluid Containment Pan

#### CONTROL SYSTEM

- Spare Inputs (x4) / Outputs (x4)
- O Battery Disconnect Switch

#### CIRCUIT BREAKER OPTIONS

- O Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker O Shunt Trip and Auxiliary Contact
- O Electronic Trip Breakers

#### ENCLOSURE

- O Weather Protected Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- O Level 2 Sound Attenuation with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- O Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch
- O Enclosure Heater
- O Damper Alarm Contacts

#### WARRANTY (Standby Gensets Only)

- O 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- O 5 Year Extended Limited Warranty
- O 7 Year Extended Limited Warranty O 10 Year Extended Limited Warranty

#### CONTROL SYSTEM

- O NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- O il Temperature Indication and Alarm
- O Remote E-Stop (Break Glass-Type, Surface Mount) O Remote E-Stop (Red Mushroom-Type,
- O Remote E-Stop (Red Mushroom-Type, Flush Mount)
- O 100 dB Alarm Horn
- Ground Fault Annunciation
- O 120V GFCI and 240V Outlets
- O Remote Communication Modem
- 10A Engine Run Relay

#### FUEL TANKS (Size On Last Page)

- O 8 in (203.2 mm) Fill Extension
- O 13 in (330.2 mm) Fill Extension
- O 19 in (482.6 mm) Fill Extension
- Overfill Protection Valve
- 5 Gallon Spill Box Return Hose
- O 5 Gallon Spill Box Tank Risers
- O Fuel Level Switch and Alarm
- 12' Vent System
- O Fire Rated Stainless Steel Fuel Hose

- **ALTERNATOR SYSTEM** O 3rd Breaker System
- **GENERATOR SET**
- O Special Testing

### **FUEL TANKS**

- O UL2085 Tank
- Stainless Steel Tanks
- Special Fuel Tanks Vent Extensions

# SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

**EPA Certified Stationary Emergency** 

#### APPLICATION AND ENGINEERING DATA

#### **ENGINE SPECIFICATIONS**

| - 1 | $\mathbf{r}$ | n | n | 0 | m |  |
|-----|--------------|---|---|---|---|--|

| /lake                              | Perkins                 |
|------------------------------------|-------------------------|
| PA Emissions Compliance            | Stationary Emergency    |
| PA Emissions Reference             | See Emission Data Sheet |
| Sylinder #                         | 4                       |
| ype                                | In-Line                 |
| Displacement - in <sup>3</sup> (L) | 135 (2.22)              |
| lore - in (mm)                     | 3.3 (84)                |
| stroke - in (mm)                   | 3.9 (100)               |
| Compression Ratio                  | 23.3:1                  |
| ntake Air Method                   | Turbocharged            |
| Sylinder Head                      | Cast Iron               |
| Piston Type                        | Aluminum                |
| rankshaft Type                     | Forged Steel            |
|                                    |                         |

## **Engine Governing**

| Governor                            | Electronic Isochronous |
|-------------------------------------|------------------------|
| Frequency Regulation (Steady State) | ±0.5%                  |

| Lubrication System          |             |  |
|-----------------------------|-------------|--|
| Oil Pump Type               | Gear        |  |
| Oil Filter Type             | Full-Flow   |  |
| Crankcase Capacity - qt (L) | 11.2 (10.6) |  |

#### Cooling System

| Cooling System Type    | Closed Recovery         |
|------------------------|-------------------------|
| Water Pump Type        | Pre-Lubed, Self Sealing |
| Fan Type               | Pusher                  |
| Fan Speed - RPM        | 1,980                   |
| Fan Diameter - in (mm) | 18 (457)                |

#### Fuel System

| Fuel Type                  | Ultra Low Sulfur Diesel Fuel #2 |
|----------------------------|---------------------------------|
| Fuel Specifications        | ASTM                            |
| Fuel Filtering (Microns)   | 5                               |
| Fuel Inject Pump           | Distribution Injection Pump     |
| Fuel Pump Type             | Engine Driven Gear              |
| Injector Type              | Mechanical                      |
| Fuel Supply Line - in (mm) | 0.31 (7.9) ID                   |
| Fuel Return Line - in (mm) | 0.2 (4.8) ID                    |

#### Engine Electrical System

| System Voltage             | 12 VDC                       |
|----------------------------|------------------------------|
| Battery Charger Alternator | Standard                     |
| Battery Size               | See Battery Index 0161970SBY |
| Battery Voltage            | 12 VDC                       |
| Ground Polarity            | Negative                     |

#### **ALTERNATOR SPECIFICATIONS**

| Standard Model                      | K0035124Y21   |  |
|-------------------------------------|---------------|--|
| Poles                               | 4             |  |
| Field Type                          | Revolving     |  |
| Insulation Class - Rotor            | Н             |  |
| Insulation Class - Stator           | Н             |  |
| Total Harmonic Distortion           | <5% (3-Phase) |  |
| Telephone Interference Factor (TIF) | < 50          |  |

| Standard Excitation                | Brushless                |  |
|------------------------------------|--------------------------|--|
| Bearings                           | Single Sealed            |  |
| Coupling                           | Direct via Flexible Disc |  |
| Load Capacity - Standby            | 100%                     |  |
| Prototype Short Circuit Test       | Yes                      |  |
| Voltage Regulator Type             | Digital                  |  |
| Number of Sensed Phases            | All                      |  |
| Regulation Accuracy (Steady State) | ±0.25%                   |  |

# RAMAKER GENERAC INDUSTRIAL

PREPARED FOR:



(608) 643-4100 www.ramaker.com

CONSULTANT:

## GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

hereby certify that this plan, specification, or report was prepare, by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of <u>Connecticut</u>.



RK DATE DESCRIPTION

LEBANON FA ID # 10035007

DATE 05/26/202 I

244 GATES ROAD EBANON, CT 06249

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

50179 F-4 I

GENERAC 30KW GENERATOR SPECIFICATIONS

**TTS Series Switches 200 Amps 600 VAC** 



TAS200 TAS200

**200A Automatic Transfer Switch** 

**TAS200** 

1 of 3 2 of 3

## The Generac TAS200 Automatic Transfer Switch

Flexibility for multiple application installations

Multiple generator support with 3 source panel

Designed with a 6 inch touch screen controller for improved user interface

Camlock functionality for mobile generator sources



# **Features**

- STEEL CONSTRUCTION
- NEMA 3R ENCLOSURE WITH HINGED "PADLOCKING" DOORS
- STAINLESS STEEL HARDWARE
- CAMLOCK "QUICK CONNECT" CAPABILITY
- OPERATIONAL STATUS VIEW VIA **6 INCH TOUCH SCREEN**
- TEST FUNCTION FAST TEST & NORMAL TEST
- UL1008 LISTED FOR EMERGENCY SYSTEMS

# **Optional Features**

- EXTENDED WARRANTY
- THREE-PHASE VOLTAGE CONFIGURATIONS

# **Codes and Standards**

Generac products are designed to the following standards:



UL1008, UL508, UL50. CSA C22.2 No. 178



NEC 700, 701 and 702



**NEMA 250** 

# **Application and Engineering Data**

| Dimensions       | 24"W x 12"D x 48"H                                |
|------------------|---|
| Weight           | 210 lbs.  |
|                  | Single Chamber with Main Door                     |
|                  | Steel   |
| Construction     | UL Type / NEMA 3R Rated                           |
|                  | Powder Coat Finish for Corrosion Resistance       |
|                  | C-UL-US Listed - Automatic Transfer Switch        |
|                  | Stainless Steel Hardware                          |
|                  | 3-Point Latching System with Pad-Lockable Handles |
| Mounting Ontions | Wall  |
| Mounting Options | H-frame   |
| Installed        | Pre-wired alarm terminal strip                    |

| Voltage/Phase/Amps                            | 120/240 Single-Phase, 200A<br>120/208 3-Phase, 200A<br>120/240 3-Phase, 200A |  |
|---|--|--|
|   | Eaton 200 amp Utility Breaker  |  |
| Breaker                                       | Eaton 200 amp Generator Breaker  |  |
| Maximum RMS Symmetrical Fault Current - Amps  | 25k AIC Rated  |  |
| Protective Device Continuous Rating (Max) Amp | 200  |  |
| Input to Generator                            | 350MCM - #6 AWG  |  |
| Output to Site                                | 350MCM - #6 AWG  |  |
| Generator Annunciator Connector               | Deutsch DTM04-12PA-L012  |  |
|   | Generator Run Alarm  |  |
|   | Generator Fail — Shutdown Alarm  |  |
| Alarm Terminal Board                          | Generator Fail – Non Shutdown Alarm  |  |
|   | Low Fuel Alarm   |  |
|   | Generator Theft Alarm  |  |
|   | AC Utility Fail Alarm  |  |

| Camlock Component                 |   |         |
|-----------------------------------|---|---------|
| Camlock Component                 | Shipped loose for multiple installation options                 |         |
| Dimensions                        | 9" W x 9.4" D x 24.25" H  | GENERAG |
| 200A Camlock Generator Connection | Single-Phase: Black L1, Red L2, White-Neutral, Green-Ground     |         |
|                                   | 3-Phase: Black L1, Red L2, Blue L3, White-Neutral, Green-Ground |         |
|                                   | Uses 4 CH E1016 Male Connectors                                 |         |
|                                   | Mating Connector – CH E1016 Female                              |         |



PREPARED FOR:



CONSULTANT:

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MARK DATE DESCRIPTION

DATE 05/26/2021

LEBANON FA ID # 10035007

PROJECT INFORMATION 244 GATES ROAD LEBANON, CT 06249

GENERAC ATS SPECIFICATIONS

SCALE: NONE

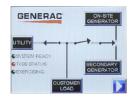
50179 E-5

 $\odot$ 

TAS200

#### **Touch Screen Interface**





#### INDICATORS AND BUTTONS

- · System Ready indicator
- Standby Operating indicator
- Utility Available indicator
- GEN/UTIL Switch Position indicator
- TVSS status

- Normal Test button
- Fast Test button
- Return to Normal button
- Reset button
- Exercising indicator

## **DETAILS SCREEN**

#### System Settings:

- System Voltage/Phases:
- 120/240V single phase (standard)
- 120/208V three phase (optional)
- 120/240V three phase (optional)
- Utility Fail Monitor:
- Under Voltage: 75-95% of nominal voltage
- Over Voltage: 105%-125% of nominal voltage
- Pickup (hysteresis): fixed at 5 volts
- Delay time: 0-60s
- Utility Interrupt Delay: 0-60s
- Return to Utility Timer: 1-30 minutes
- Transfer:
- In-phase, or
- Time-Delay-Neutral at 0.0-10.0s in 1 second increments

#### **Engine Settings:**

- Engine Warm-up timer: 0-20 minutes
- Generator Load Accept:
- Time-Delay-Neutral at 0.0-10.0s in 1 second increments
- Voltage: 85-95% of nominal
- Frequency: 85-95% of nominal
- Engine Minimum Run Timer: 5-30 minutes
- Engine Cooldown Timer: 0-20 minutes

## **Exercise Settings:**

- Time of day
- · Day of week
- Exercise:
- Exercise with/without load
- Exercise once every 1, 2, or 4 weeks.
- Exercise time-of-day - Exercise day of week
- Exercise duration: 15-30 minutes

#### Screen Settings:

- · Brightness & Contrast button
- Screen Calibration button
- Startup/Clean screen

# Diagnostics:

- Digital I/O bits status
- Voltage A/D readings

## Mimic Diagram:

- System Ready
- · Transfer switch position
- Utility available
- Standby available
- Maintenance/Auto switch position Generator source TS position
- TVSS status

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PREPARED FOR:



CONSULTANT:

## GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

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MARK DATE DESCRIPTION

LEBANON FA ID # 10035007

DATE 05/26/2021

PROJECT INFORMATION 244 GATES ROAD LEBANON, CT 06249

GENERAC ATS SPECIFICATIONS

SCALE: NONE

50179 PROJECT NUMBER SHEET E-5.1

GENERAC ATS SPECIFICATIONS

## 244 GATES RD

**Location** 244 GATES RD **Mblu** 208//55//

Acct# S0154300 Owner NEW CINGULAR WIRELESS

PCS LLC

**Assessment** \$179,780 **PID** 1091

**Building Count** 1

#### **Current Value**

| Assessment     |          |           |           |  |
|----------------|----------|-----------|-----------|--|
| Valuation Year | Land     | Total     |           |  |
| 2018           | \$21,500 | \$158,280 | \$179,780 |  |

#### **Owner of Record**

Owner

NEW CINGULAR WIRELESS PCS LLC Sale Price \$1

Co-Owner

 Address
 909 CHESTNUT ST 36-M-01
 Book & Page
 0294/0582

 ST LOUIS , MO 63101
 Sale Date
 06/23/2015

Instrument 25

Certificate

### **Ownership History**

| Ownership History              |            |             |             |            |            |
|--------------------------------|------------|-------------|-------------|------------|------------|
| Owner                          | Sale Price | Certificate | Book & Page | Instrument | Sale Date  |
| NEW CINGULAR WIRELESS PCS LLC  | \$1        |             | 0294/0582   | 25         | 06/23/2015 |
| AT&T CAPITAL SERVIES INC       | \$0        |             | 0291/1006   | 31         | 10/28/2014 |
| SOUTHERN NEW ENGLAND TELEPHONE | \$0        |             | 0072/0507   | 29         |            |

## **Building Information**

## **Building 1 : Section 1**

Year Built: 1961
Living Area: 900
Replacement Cost: \$29,433
Building Percent Good: 70

Replacement Cost

Less Depreciation: \$20,600

**Building Attributes** 

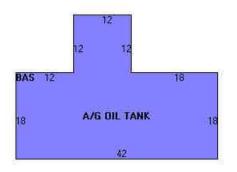
| Field            | Description      |
|------------------|------------------|
| Style            | Support Shed     |
| Model            | Industrial       |
| Grade            | Average +10      |
| Stories:         | 1                |
| Occupancy        |                  |
| Exterior Wall 1  | Concr/Cinder     |
| Exterior Wall 2  |                  |
| Roof Structure   | Shed             |
| Roof Cover       | Tar + Gravel     |
| Interior Wall 1  | Minim/Masonry    |
| Interior Wall 2  |                  |
| Interior Floor 1 | Concr-Finished   |
| Interior Floor 2 |                  |
| Heating Fuel     | None             |
| Heating Type     | None             |
| AC Type          | None             |
| Struct Class     |                  |
| Use:             | CELL TOWR MDL-96 |
| Total Rooms      |                  |
| Total Bedrms     | 00               |
| Total Baths      | 0                |
| Usrfld 218       |                  |
| Usrfld 219       |                  |
| 1st Floor Use:   | 4310             |
| Heat/AC          | NONE             |
| Frame Type       | MASONRY          |
| Baths/Plumbing   | NONE             |
| Ceiling/Wall     | NONE             |
| Rooms/Prtns      | LIGHT            |
| Wall Height      | 10.00            |
| % Comn Wall      | 0.00             |
| Usrfld 100       |                  |
| Usrfld 302       |                  |
| Usrfld 301       |                  |
| Usrfld 303       |                  |
| Usrfld 103       |                  |
| Usrfld 107       |                  |
| Usrfld 304       |                  |
| Usrfld 104       |                  |
| Usrfld 105       |                  |

# **Building Photo**



(http://images.vgsi.com/photos/LebanonCTPhotos/\00\01\22\56.jpg)

# **Building Layout**



 $(http://images.vgsi.com/photos/LebanonCTPhotos//Sketches/1091\_1091.jc$ 

|      | Building Sub-Areas | (sq ft)       | <u>Legend</u>  |
|------|--------------------|---------------|----------------|
| Code | Description        | Gross<br>Area | Living<br>Area |
| BAS  | First Floor        | 900           | 900            |
|      |                    | 900           | 900            |

| No |
|----|
| No |
|    |

# Extra Features

| Extra Features             | <u>Legend</u> |
|----------------------------|---------------|
| No Data for Extra Features |               |

### Land

| Land Use      |                  | Land Line Valuation |           |  |
|---------------|------------------|---------------------|-----------|--|
| Use Code      | 4310             | Size (Acres)        | 1.74      |  |
| Description   | CELL TOWR MDL-96 | Frontage            | 0         |  |
| Zone          |                  | Depth               | 0         |  |
| Neighborhood  | 12               | Assessed Value      | \$158,280 |  |
| Alt Land Appr | No               |                     |           |  |
| Category      |                  |                     |           |  |

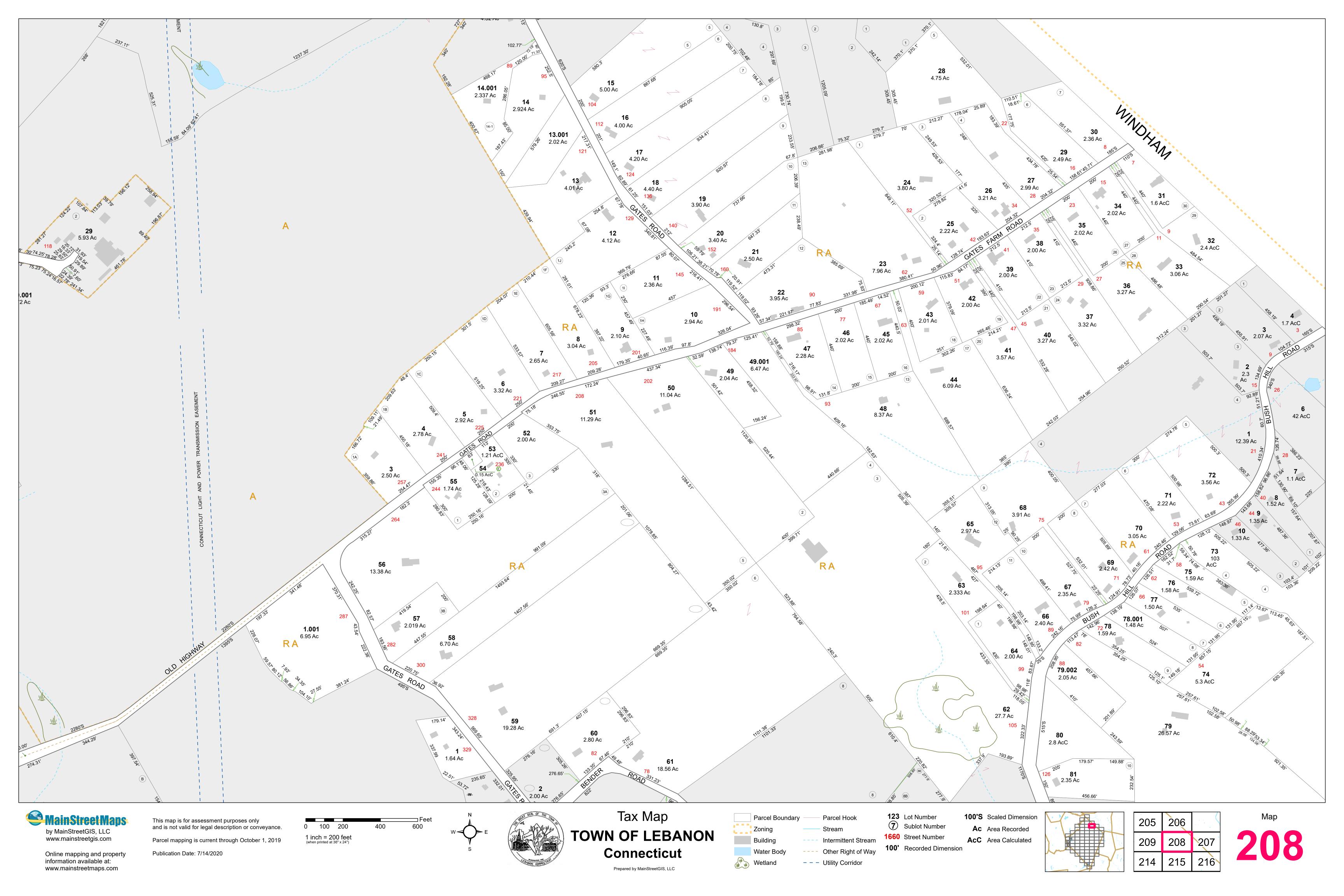
# Outbuildings

|      | Outbuildings <u>Le</u> |          |                 |               |         |        |
|------|------------------------|----------|-----------------|---------------|---------|--------|
| Code | Description            | Sub Code | Sub Description | Size          | Value   | Bldg # |
| TW2  | CELL TOWER             |          |                 | 120.00 HEIGHT | \$0     | 1      |
| FN3  | FENCE-6' CHAIN         |          |                 | 340.00 L.F.   | \$1,530 | 1      |
| SHDC | Shed - Cell tower      |          |                 | 300.00 S.F.   | \$8,580 | 1      |

# Valuation History

| Assessment     |                   |           |           |  |
|----------------|-------------------|-----------|-----------|--|
| Valuation Year | Improvements Land |           | Total     |  |
| 2020           | \$21,500          | \$158,280 | \$179,780 |  |
| 2019           | \$21,500          | \$158,280 | \$179,780 |  |
| 2018           | \$21,500          | \$158,280 | \$179,780 |  |





# ATTACHMENT 2



# STATE OF CONNECTICUT

### CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401 New Britain, Connecticut 06051 Phone: 827-7682

Dibble Pond

COMMISSIONERS

Energy/Telecommunications

Peter G. Boucher Leslie Carothers

Hazardous Waste/Low-level Radioactive Waste

Frick G. Adams B. ..ard R. Sullivan

COUNCIL MEMBERS

Harry E. Covey Mortimer A. Gelston Daniel P. Lynch, Jr. Paulann H. Sheets William H. Smith Colin C. Tait

Joel M. Rinebold Executive Director

Stanley J. Modzelesky Executive Assistant April 10, 1990

Peter J. Tyrrell Senior Attorney SNET Cellular, Inc 227 Church Street New Haven, CT 06506

RE: SNET Cellular Inc., (SCI) Notice of Intent to Modify an Exempt Tower and Associated Equipment owned by the Southern New England Telephone Company (SNET) in Lebanon, Connecticut.

Dear Attorney Tyrrell:

At a meeting on April 9, 1990, the Connecticut Siting Council acknowledged your notice of intent to modify an exempt telecommunications tower and associated equipment located on Gates Road in Lebanon, Connecticut, pursuant to Section 16-50j-73 of the Regulations of State Agencies (RSA).

The proposed modifications are to be implemented as specified in your notice dated March 1, 1990, "Option Two", the replacement of both of the existing 80-foot and 120-foot guyed SNET towers with one self-supporting 120-foot tower. As proposed, the modifications are in compliance with the exception criteria specified in RSA Section 16-50j-72(b)(3) as a replacement of an existing CATV tower or telecommunications tower and associated equipment with a tower that is no taller than the tower to be replaced and that will not support public service company or state antennas, or antennas to be used for public cellular radio communications emitting total radio frequency electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to Section 22a-162 of the Connecticut General Statutes.

Peter J. Tyrrell April 10, 1990 Page 2

The Council is pleased to note that the shared use of an existing tower meets the Council's long-term goal and the public interest to avoid the proliferation of additional tower structures.

Enclosed for your reference is a copy of the Staff Report on this Exempt Modification, dated April 9, 1990. Please notify the Council upon completion of construction.

Very truly yours,

Glowa Delible Pondia

Gloria Dibble Pond Chairperson

Enclosure

cc: Donald Chapman

4313E-4



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401 New Britain, Connecticut 06051 Phone: 827-7682

Notice of Intent of Modify an Existing Tower
SNET Cellular, Inc.
Lebanon, Connecticut
April 9, 1990

On March 1, 1990, SNET Cellular Inc. (SCI) submitted to the Siting Council a Notice of Intent to Modify a tower and associated equipment in the Town of Lebanon. On March 7, 1990, Robert A. Pulito of the Siting Council and Joel M. Rinebold and Robert K. Erling of the Council staff visited the Lebanon site on which the proposed modifications would take place. On March 30, 1990, Council members Mortimer A. Gelston and Colin C. Tait visited the site with Council staff members Joel M. Rinebold and Robert K. Erling.

SCI has proposed two options to replace an existing 120-foot guyed telecommunications tower on Gates Road in Lebanon. This tower site would be leased from its current owner, the Southern New England Telephone Company (SNET), and would be used to provide cellular telephone service in New London County, overlapping with coverage from an adjacent cell site in Colchester, and a planned cell site in Ashford.

There are currently four existing guyed towers on two adjacent properties on this hilltop site. Two of these towers are owned by SNET on SNET property containing 1.7 acres. These towers are 80 feet and 120 feet in height. Two towers on an adjacent property of 1.2 acres owned by Colin K. and Loretta L. Rice are 120 feet and 290 feet in height. The 120-foot tower on the Rice property is owned by Tele-Media Company of Northeastern Connecticut, and was certificated by the Council as part of Docket 43 in 1984. The 290-foot tower is owned by radio station WILI.

The 120-foot SNET tower is painted and lighted because it was constructed before the nearby WILI tower, which is also obstruction marked and lighted.

The following guying information was supplied by SCI.

| Tower Owner | <u>Height</u> | No. of sets of 3-guy wires | Tower Distance to<br>Farthest guy wires |
|-------------|---------------|----------------------------|---|
| SNET        | 80 feet       | 1                          | 65 feet                                 |
| SNET        | 120 feet      | 3                          | 100 feet                                |
| Tele-Media  | 120 feet      | 3                          | 80 feet                                 |
| WILI        | 290 feet      | 6                          | 150 feet                                |

Both SNET towers were constructed in 1960. The WILI tower was constructed in 1980, and the Tele-Media tower was built in 1984. All four of these towers were erected prior to the construction of any of the nearby homes on Gates Hill Road. These homes were built between 1987 and 1988.

Option One of SCI involves the replacement of the existing 120-foot SNET tower with another 120-foot guyed tower which has the capacity to support both the existing antennas and new cellular transmit and receive antennas. The existing 120-foot tower cannot accommodate the proposed cellular antennas. The existing 80-foot SNET tower would remain in place.

Option Two of SCI would replace both of the existing SNET towers with a single 120-foot self-supporting tower. The replacement of the two existing towers would mean the removal of 1808 feet of guy wires. The proposed 120-foot tower would measure approximately 10 feet across at its base and taper to six feet at its top. Each of the two existing towers has a width of three feet. The two existing SNET towers would be removed within six months after the installation of the new tower.

Neither Option One nor Option Two would increase the height of a tower on the SNET property, extend the boundaries of the SNET property, increase noise levels at the site boundary, or increase the total radio frequency electromagnetic radiation power density at the tower site boundary to or above the State Standard of 2.933 mW/cm<sup>2</sup>.

SNET does not propose to paint or light the replacement tower or associated dish antennas. SNET has requested the elimination of this painting and lighting requirement for this tower from the Federal Aviation Administration, but has not yet received a response.

A meeting between SCI and the Lebanon Building Inspector indicates that the construction of the new equipment building on the SNET site is a permitted use at this location, requiring a building permit.

Pursuant to Section 16-50j-72(b) of the Connecticut Regulations of State Agencies, "None of the following shall constitute a modification to an existing community antenna television or telecommunications tower that may have substantial adverse environmental effect:

- (1) Routine general maintenance and one-for-one replacement of facility components that is necessary for reliable operation;
- (2) Changes on an existing tower site that do not increase the tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by 6 decibels, and add radio frequency sending or receiving capability which increases the total radio frequency electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to Section 22a-162 of the Connecticut General Statutes; or
- (3) Replacement of an existing CATV tower or telecommunications tower and associated equipment with a tower that is no taller than the tower to be replaced and that will not support public service company or State antennas, or antennas to be used for public cellular radio communications emitting total radio frequency electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to Section 22a-162 of the Connecticut General Statutes.

Robert K. Erling Senior Siting Analyst

RKE/cp

4237E

| Permit | No | 0 | 8   | 2 | 2 |
|--------|----|---|-----|---|---|
| Zone:  | R  | A | 371 |   |   |

# TOWN OF LEBANON

|  | ord Date: 5-15-   |  | VALID FOR ONE YEAR   |
|--|---|--|--|
| Owner: Southe  | rn Mus Engl   | and Tes  | lephano Attalino on  |
| DESCRIPTION  | reh Street, No  | S Naven, CT  | 1 06510 Phone 771-5926   |
| New: Addising  |   |  |  |
| Addition:  | (Accessory: Remodel:  | Alteration: Oth  | er: Seasonal: Year Round:  |
| - New Keec   | ast tolon   | NOME EG  | gioment Blda   |
| and now  | Town.   | $\bigcap$ 1  | N The state of the |
| No was   | tex 1   | way lan  | occupied   |
| E5   |   | 4.74   |  |
| regulations of the Town of permit is issued, and to ob | conform to all requirements of Lebanon, and to notify the tain a certificate of occupan | of the laws of the S<br>Building Official of<br>acy before using thi | WOLLSHOR ACCURATE  |
| Type: 30   |   | Tile Bath:   | Lot No.:   |
|  | Int. Walls: Cerriel   | Walls:   | Set Back: let Olive  |
| No. of Rms:  |   | Shower:  | Side Yard:   |
| No. of Stories:  | Electrical:   | 1.5015.  | Back Yard:   |
| Floor Area: 3/2/7                                      |   | Heating:   | Sub-Div.:  |
| 2/2/9  | No. of Bathrooms:   | Wa. Htg  | Hot Water Supply   |
| Foundation: Concrete                                   | vision ballifooths:   | Stm. Htg:  |  |
|  | No. of Toilet Rms.:   | H. W. Hig:<br>Space Hig:   | Fireplace:   |
| Construction: Cenquele                                 |   | Space ring:  | City Water:  |
| Ext. Walls: Perchile                                   | Plumbing Fixtures:  |  | Well Water:  |
| Ext. Walls: Butte                                      | Sink:   | Fuel:  | war vvaler:  |
|  | Toilets:<br>Basins:   | Oil:   | Septic:  |
| Roofing: (incule                                       | Bathtubs:   | Gas:   | Sewer:   |
|  | Shrstall:   | Elec.:   |  |
| Basement:  |   | Air Cond.:   |  |
| Separate Permits Required                              | T.  | All Cond.:   | 7 72   |
| Separate Permits Required:                             | Elect, Heat, Plumb, Sep   | tic, Well, Stove,  | All Masonry  |
| Architect: Bayar                                       | + Associates, En  | A A  |  |
| Address: 120 Minst                                     | 11000010100 , 61  | SINDIAN  | Est Cost: 7/,000.00  |
| TO I PROPILE   | OMMY RUE SCA  | redule, No   | 7  |
| Builder: Thomas (                                      | License #:  |  | \$5 per 1,000 Est Cost.  |
| Address: P.J. Box 2                                    |   | C+ near  |  |
| Applicant's and/or Owne<br>Signature:                  | er: On AAL.   | CT, 0606   | . 70   |
|  | Zasal M.  | Sprin  | Total: 355,  |
| ssued by Building Insp                                 | ector: herald   | John -   |  |
| oning Officer:   | 7/1/11  |  |  |

# ATTACHMENT 3

### CERTIFICATE OF SERVICE

I herby certify that on the 16<sup>th</sup> day of June, 2021 one original and two copies of AT&T's Exempt Modification Request was sent to the Connecticut Siting Council electronically and via overnight mail and a copy of the same was sent via Certificate of Mailing to:

Kevin Cwikla, First Selectman Town Hall Lebanon 579 Exeter Road Lebanon, CT 06240

Philip Chester, Town Planner Town Hall Lebanon 579 Exeter Road Lebanon, CT 06240

New Cingular Wireless PCS, LLC 909 Chestnut Street 36-M-01 St. Louis, MO 63101

Dated: June 16, 2021

Daniel Patrick

Cuddy & Feder LLP

445 Hamilton Ave, 14<sup>th</sup> Floor White Plains, NY 10601

(914) 761-1300

Attorneys for the Applicant